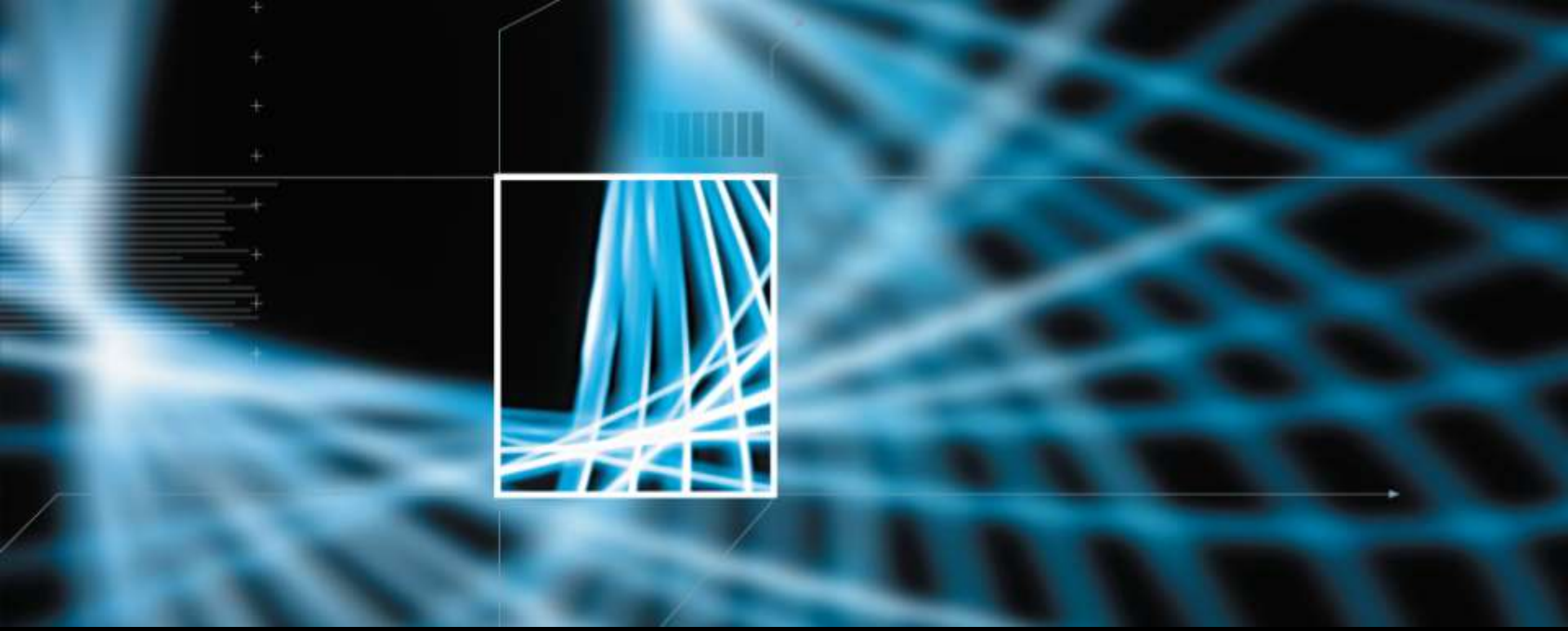

Information Sharing in the UK

Andrew Powell, Information Sharing Workshop,

Amsterdam, 16 March 2010

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Objectives

- UK Information sharing activities
- Role of private sector
- Role of public sector
- Critique
- Input to pan-European initiatives

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Why Share Information

- 1+1>0
- Need: much infrastructure is privately owned and operated
- Regulation is a blunt instrument
- Sharing promotes agility to change
- Added value for all

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The Ingredients for sharing

- A basis for trust
  - Openness
  - Confidentiality
  - Honesty
  - Regular contact
- Information sharing protocol

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What the UK is sharing

- **Risks and their mitigation**
- Private sector-to-private sector security incident and vulnerability information
- Private sector-to-public sector confidential incident and vulnerability reporting where public sector can *respond and warn*
- Public sector issued good practices and incident and vulnerability alerts
  - Has to be relevant to the UK's Critical Infrastructure Protection (CIP)
  - Based on partnership with private sector

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UK's Information Sharing Initiatives

- **Information exchanges**
- Information sharing portals
- Warning, advice and reporting points
  - http://www.warp.gov.uk/
- Support for international groups and projects
- Other information sharing activities

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Information Exchange Structure

- Trusted group of private sector and public sector representatives
- Rules of membership
- No cost to members
- 2 members per organisation
- Cannot delegate outside of prime and deputy members
- Information sharing protocol

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Information Exchange Structure

- Private sector and public sector co-chairs
- CPNI co-ordinator generally
- CPNI hosted generally
- Always face-to-face meetings
- Supported by email and members only extranet web pages
- Some information exchanges have working groups which develop good practice

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Information Exchange Structure

- New members elected by all members
- Shared area on extranet for all information exchanges
- Joint information exchange sharing day in 2008
- Access to security advice documents from CPNI

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Information Exchange History

- First one established in 2003 using the model of the US Network Security Information Exchange
- Currently 12 information exchanges
- Based on sector, technology or activity
- Trust can take up to 2 years to establish

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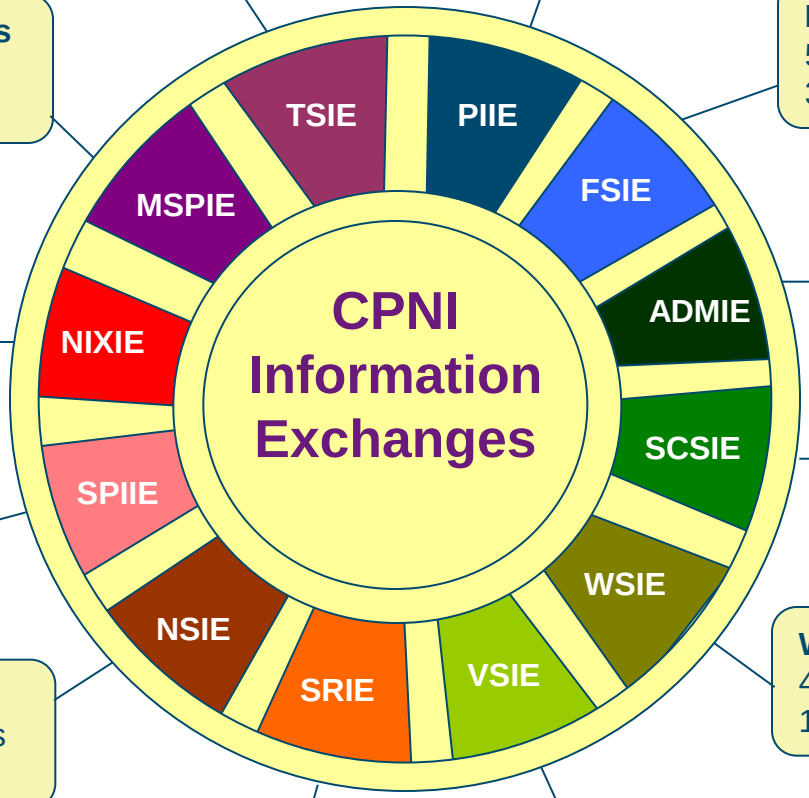
Information Exchanges



Transport Sector
28 Representatives
18 Companies

Pharmaceuticals Private sector
12 Representatives
7 Companies

Managed Service Providers
36 Representatives
23 Companies

Finance Sector
54 Representatives
34 Companies

Northern Ireland Cross sector
26 Representatives
14 Companies

Aerospace/Defence
32 Representatives
17 Companies

SCADA
77 Representatives
37 Companies

Space Industries
10 Representatives
7 Companies

Water Security
40 Representatives
18 Companies

Network Security
27 Representatives
15 Companies

Security Researchers
30 Representatives
15 Companies

Vendor Security
23 Representatives
15 Companies

12 Exchanges

220 Companies

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Information Exchange Working Groups

- Across information exchanges. Published papers on:
  - Ethernet switches
  - Outsourcing
  - Protecting data centres
  - Server virtualisation

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International Activity

- CPNI supports EP3R and other European Commission initiatives
- CPNI supports ENISA initiatives
- CPNI contributes to international CSIRT groups such as the European Government CSIRTs group and FIRST
- CPNI contributes to MERIDIAN, an international Public sector CIIP group using a traffic light information sharing protocol

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International Activity

- CPNI supports the International CIIP directory
- CPNI participates in the European SCADA and Control Systems Information Exchange (e-SCSIE)
- CPNI promotes the formation of Warning, Advice and Reporting Points (WARPs) and Information Exchanges

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Other Information Sharing Activities

- CPNI participates in information sharing groups nationally and internationally
- CPNI tries not “to re-invent the wheel”
- CPNI provides advice on setting up information sharing groups to UK organisations

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Role of Private Sector

- Private sector form the primary membership of the exchange
- Private sector sets the direction of the exchange
- Private sector brings knowledge of good practice
- Private sector knows what can be achieved

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Role of Public Sector

- Public sector provides the trusted environment
- Public sector has specialist knowledge
  - Policy/Laws/Regulations
  - Hazards/Threat/Vulnerabilities
- Public sector can represent a consensus position

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Information Exchange Critique

- Establishing and maintaining trust is key
- Not scalable to large groups
- Must be face-to-face
- Large groups undermine trust
- Change of membership (“churn”) undermines trust
- Non-contribution (“lurking”) undermines trust

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Possible Futures

- To address scalability:
  - Federated information sharing structures
  - Group of all information exchanges
- To address legal and regulatory changes:
  - Agree system of internal need-to-know controls so that law makers and regulators can be aware of problems without penalising honesty of participants

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Possible Futures

- To address balance between need-to-know and need-to-share:
  - Education that AMBER means that you should share within your company
  - More GREEN information on organisational intranets.

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Application to Pan-European Initiatives

- National information sharing groups
- Information sharing protocol
- Knowledge transfer from mature national initiatives
- Sharing between member states
- Facilitation by ENISA (“providing the trusted environment”)

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Application to Pan-European Initiatives

- Good practice outputs
- Addressing the regulatory challenges
  - Dialogue with private sector
- Awareness of key common risks
- A plan to address those risks

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Questions

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